

31. Nawroz, H., Koch, W., Anker, P., Stroun, M. & Sidransky, D. Microsatellite alterations in serum DNA of head and neck cancer patients. *Nat Med* 2, 1035-1037 (1996).

32. Stroun, M., Anker, P., Lyautey, J., Lederrey, C. & Maurice, P.A. Isolation and characterization of DNA from the plasma of cancer patients. *Eur J Cancer Clin Oncol* 23, 5 707-12 (1987).

33. Mansi, J.L. et al. Bone marrow micrometastases in primary breast cancer: prognostic significance after 6 years' follow-up. *Eur J Cancer* 27, 1552-5. (1991).

34. Berger, U. et al. The relationship between micrometastases in the bone marrow, histopathologic features of the primary tumor in breast cancer and prognosis. *Am J Clin Pathol* 90, 1-6 (1988).

10 35. Cote, R., Rosen, P., Lesser, M., Old, L. & Osborne, M. Prediction of early relapse in patients with operable breast cancer by detection of occult bone marrow micrometastasis. *J Clin Oncol* 9, 1749-1756 (1991).

36. Dearnaley, D.P., Ormerod, M.G. & Sloane, J.P. Micrometastases in breast cancer: 15 long-term follow-up of the first patient cohort. *Eur J Cancer* 27, 236-9 (1991).

37. Harbeck, N., Untch, M., Pache, L. & Eiermann, W. Tumour cell detection in the bone marrow of breast cancer patients at primary therapy: results of a 3-year median follow-up. *Br J Cancer* 69, 566-71 (1994).

38. Braun, S. et al. Cytokeratin-positive cells in the bone marrow and survival of patients 20 with stage I, II, or III breast cancer. *N Engl J Med* 342, 525-33 (2000).

39. Zippelius, A. et al. Limitations of reverse-transcriptase polymerase chain reaction analysis for the detection of micrometastatic epithelial cancer cells in bone marrow. *Journal of Clinical Oncology* 15, 2701-2708 (1997).

40. Bostick, P.J. et al. Limitations of specific reverse-transcriptase polymerase chain 25 reaction markers in the detection of metastases in the lymph nodes and blood of breast cancer patients. *J Clin Oncol* 16, 2632-40 (1998).

41. Ko, Y. et al. Limitations of the reverse transcription-polymerase chain reaction method for the detection of carcinoembryonic antigen-positive tumor cells in peripheral blood. *Clin Cancer Res* 4, 2141-6 (1998).